

WISCONSIN PEST BULLETIN

Timely crop pest news, forecasts, and growing season conditions for Wisconsin



STATE OF WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION PLANT INDUSTRY BUREAU
2811 Agriculture Dr. Madison, WI 53718 • <http://pestbulletin.wisconsin.gov>

WEATHER & PESTS

Erratic weather continued, with very intense storms and torrential rain occurring throughout the week. A severe thunderstorm complex developed across south-central and southeast Wisconsin on Monday evening, producing large hail, damaging winds, and some of the heaviest rain of the year. Five tornadoes were documented, the strongest of which damaged at least 100 homes near the town of Eagle in Waukesha County. A second round of storms on Wednesday poured several more inches of rain onto the saturated landscape, prompting the National Weather Service to issue a flash flood watch for Jefferson, Kenosha, Milwaukee, Racine, Rock, Walworth and Waukesha counties. Crop damage due to excessive precipitation has increased markedly, especially after the deluge of the past week. Near-tropical conditions have favored development of various plant diseases, and insect activity continues to progress ahead of normal.

LOOKING AHEAD

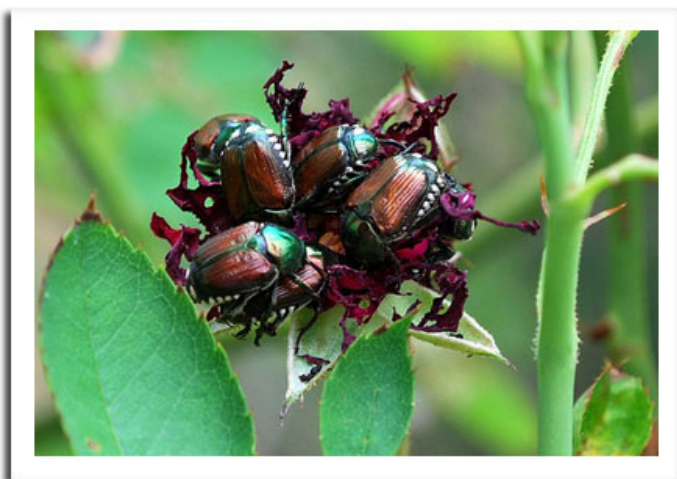
TRUE ARMYWORM: Damage has intensified in wheat fields in the east-central, central and south-central crop districts. Larvae have not infested corn to the same degree, but there is a distinct possibility for further increase before activity subsides. A report from Fond du Lac County states that corn following winter rye has been

“ravaged”, and as many as 16-42 larvae per sq. foot have been observed in wheat. Based on informal estimates, about 10,000 acres were treated in Brown, Fond du Lac, Calumet, Green Lake, Washington and Winnebago counties in the past two weeks, and roughly 2,500-3,000 acres were sprayed in Dodge, Manitowoc and Sheboygan counties. Continued scouting for armyworm larvae is imperative, particularly in lodged wheat and the edge rows of corn next to small grains or alfalfa.

SOYBEAN APHID: Small colonies have become increasingly common in soybeans, but densities remain low. Surveys this week found populations of 2-45 aphids per infested plant in 42% of fields examined. One exceptional field in Sauk County had an average of 112 per infested plant on 60% of the plants, the highest density found thus far. All soybean fields should be checked for aphids next week and regularly throughout July and August.

WESTERN BEAN CUTWORM: The pheromone trapping program is underway. State specialists, county extension personnel, consultants and farmers have set 114 traps to date, including about 30 in the core area of Adams, Marquette and Green Lake counties where the largest flights have been documented in past years. The first moth was registered in the trap at Janesville on June 23, and the phenology model for this insect indicates that 25% emergence of the population can be expected from July 1-8 in southern and central Wisconsin.

JAPANESE BEETLE: The first beetles appeared in trap collections at apple orchards in Racine and Walworth counties on June 16, approximately two weeks earlier than in the previous year. Latest reports also verify their emergence in Dane, Rock, Sauk and Trempealeau counties. Damage to fruits, vegetables, ornamentals and field crops is expected to intensify over the next six weeks, and control may be warranted in many cases.



Japanese beetles

nhaldar flickr.com

ALERTS

TRUE ARMYWORM: Since last mention of this insect in the July 18 bulletin, 45 wheat fields in Calumet, Columbia, Dodge, Green Lake, Fond du Lac, Sheboygan, Washington and Winnebago counties have been examined for evidence of armyworms. Twelve percent were moderately-heavily infested, 35% appeared to have been treated, and 53% had no apparent population.

According to reports from county extension agents and local cooperatives, the areas of highest concentration are in Brown, Green Lake and Fond du Lac counties, where collective estimates suggest 8,000-9,000 acres have been treated since June 16. Localized infestations have also been found in Calumet, Dane, Dodge, Manitowoc, Sheboygan and Winnebago counties.

During outbreak situations, lodged grain and other susceptible fields should be monitored every few days for migrating armyworms. Treatment for infestations of 3 or more larvae per sq. foot may be applied when the larvae are ½-¾ inches and continued feeding is expected. Most larvae in Fond du Lac County were 1-1¼ inches by June 23 and should not feed much longer.

DEGREE DAYS JANUARY 1 - JUNE 24

LOCATION	50°F	2009	NORM	48°F	40°F
Dubuque, IA	1166	894	—	1190	2007
Lone Rock	1129	861	—	1130	1939
Beloit	1228	895	—	1242	2069
Madison	1095	835	955	1105	1898
Sullivan	1043	870	956	1129	1946
Juneau	1076	825	—	1098	1865
Waukesha	1005	826	—	1030	1775
Hartford	974	794	—	1007	1749
Racine	939	738	—	988	1708
Milwaukee	911	736	785	966	1672
Appleton	964	703	838	998	1740
Green Bay	851	621	805	922	1608
Big Flats	1009	771	—	994	1763
Hancock	1029	768	956	1011	1787
Port Edwards	972	734	893	976	1728
La Crosse	1120	840	1035	1122	1928
Eau Claire	1002	793	919	1009	1783
Cumberland	897	714	870	887	1630
Bayfield	655	484	622	657	1311
Wausau	887	635	821	897	1619
Medford	885	663	732	903	1622
Crivitz	822	576	—	846	1555
Crandon	803	558	686	789	1490

*Method: ModifiedB50; Sine48; ModifiedB40 as of Jan 1, 2010.
NORMALS based on 30-year average daily temps, 1971-2001.*

FORAGES

POTATO LEAFHOPPER: Surveys in alfalfa indicate that populations have increased over the last week, but remain below economic levels. Counts in Dane, Iowa, La Crosse, Monroe, Richland, Sauk and Vernon counties varied from 0.3-1.4 per sweep, while in Dodge, Fond du Lac and Winnebago counties, numbers were unusually low and ranged from 0.1-0.3 per sweep. Nymphs were observed in about 40% of surveyed fields. Recent downpours may have reduced, or at least temporarily suppressed their activity. The continuation of hot weather could cause a sharp upsurge in leafhopper populations by early to mid-July.

MEADOW SPITTLEBUG: The adult form of this insect has become very numerous in Wisconsin alfalfa, signaling that the population has matured and spittle masses should not reappear until next spring. The highest num-

ber collected from second crop alfalfa in the past week was 23 per 10 sweeps in the Westby area of Vernon County.

ALFALFA CATERPILLAR: Larvae of various sizes were collected at the rate of 1-7 per 10 sweeps in Fond du Lac, Richland, Sauk and Vernon counties. The pale yellow butterflies were also observed in low-moderate numbers over alfalfa in the same areas.

PEA APHID: Alfalfa surveyed in the southern, east-central and west-central counties contained very low numbers of pea aphids. Populations have declined considerably since early June, when counts were as high as 90 per sweep in many fields. The average this week was only 2.8 per sweep.

CORN

EUROPEAN CORN BORER: Surveys conducted in the southwest and east-central areas failed to detect any significant damage this week. Populations of first brood larvae were generally low, with infestation rates ranging from 1-14% in grain corn. Larvae varied in development from first to third instar and a few have begun entering the midribs of leaves. The treatment interval remains open for another 2-7 days in the southeast, east-central and northern counties. Field populations in corn examined as of June 24 have not justified such measures.



Leaf feeding by 2nd instar Euro corn borer larva Krista Hamilton DATCP

SLUGS: Damage is apparent in scattered corn fields throughout the state. Slugs are a common problem this season and are likely to remain so as long as the wet weather persists. Severe defoliation was observed in

Fond du Lac County and treatments were applied in a few instances. Near Oakfield, dead slugs apparently were very abundant on the roads and in areas next to sprayed fields.

WESTERN BEAN CUTWORM: The annual flight began this week near Cashton and Janesville in Monroe and Rock counties, respectively. Based on current degree day accumulations, 25% of the moth population is expected to emerge during the week of July 1-8, and the majority (50% emergence) should appear in trap collections from July 8-15. Oviposition on the flag leaf of corn has begun in areas where the adults are active. Scouting for eggs and small larvae is recommended as soon as the first moths are registered.



Western bean cutworm trap

Krista Hamilton DATCP

SOYBEANS

SOYBEAN APHID: Surveys show non-economic populations in most Wisconsin soybeans. Of the 28 fields examined this week in the east-central, central and southwest areas, 42% were found to have varying levels of infestation. Several were 10-60% infested, with individual plants showing 2-310 aphids. Regular sampling should begin next week as many soybean fields enter the early reproductive stages of growth. At current temperatures, colonies may double in size in 1½-2 days.

FRUITS

JAPANESE BEETLE: Significant numbers of beetles are already feeding on apples, grapes and raspberries in the southern and west-central counties. Even the smallest

blemish or surface injury to fruit can attract large concentrations of this insect. Spot treatment of individual trees or cultivars should be considered for orchards and vineyards that experience high populations.

PEAR THRIPS: Damage to terminals began appearing last week in Rock and Racine counties. Heavy feeding by thrips can cause abnormal leaf formation, leaf tatter, and flower damage on apple trees, usually about the time the buds expand in spring. Affected foliage turns brown and senesces prematurely. According to IPM Specialist John Aue, their appearance is relatively late this year.

APPLE MAGGOT: Emergence increased with the surplus rainfall of the past week, particularly in orchards that had severe hail damage last year. Low numbers of flies were registered on yellow sticky traps at the Brownsville, Dodgeville, Keystone and Mineral Point monitoring locations. The University of Wisconsin recommends 1 fly per **UNBAITED** trap (per week) or 5 flies per **BAITED** trap as a criterion for determining the need for control measures.



Rhagoletis sp.

magikcanoe.com

SAN JOSE SCALE: Crawlers are emerging from beneath scales in southern Wisconsin orchards. Treatments should be applied once the yellow crawlers are active, but before their waxy coverings start to form on the leaves and branches. Natural enemies frequently keep this pest under control if not eliminated by broad-spectrum insecticides.

VEGETABLES

COLORADO POTATO BEETLE: Substantial larval populations are present in home gardens in Columbia, Grant,

Sauk and Vernon counties and some commercial plantings have been affected to a lesser extent. Larvae were exceedingly abundant in one Arlington Research Station plot this week, where about 30% of the plants had been severely defoliated. Most were in the late instars as of June 23.



Colorado potato beetle larvae

Krista Hamilton DATCP

NURSERY & LANDSCAPE

LECANIUM SCALE: Light infestations of this flat, elliptical brown scale were found this week on honey locust, crabapple and hackberry trees in Washington County. Egg hatch is underway, and the mobile crawlers are active in the southern third of the state. Late June is an optimal time to target the yellow crawlers, before they settle onto the twigs and branches. Horticultural oils or soaps, insect growth regulators and conventional insecticides are all effective controls. Nursery stock retailers must promptly remove and destroy infested plants as soon as the scales are noticed. Growers of nursery plants are required to treat infested stock before it can be offered for sale.

OAK LEAF BLISTER: Red oaks in Clark, Ozaukee and Washington counties are showing symptoms of this common oak disorder, including yellow, raised areas on the upper leaf surfaces and corresponding gray depressions on the undersides. The blister fungus only infects expanding leaves in spring, whereas mature leaves are not susceptible. This aesthetic problem typically has no adverse effect on host trees. Preventive fungicide sprays can be applied early in spring before buds swell, but oak leaf blister is not a disease that usually requires control measures.



Oak leaf blister

Liz Meils DATCP

HAWTHORN RUST: Nursery inspectors observed the orange, powdery spores of this rust fungus on leaves of nannyberry hawthorns in Ozaukee and Washington counties. Hawthorn rust alternates between junipers and rosaceous plants (mostly apple, crabapple and service-berry), and requires both hosts to complete its life cycle. The fungus overwinters as ½ inch galls on juniper, so thorough removal of the dormant galls is advised. For severe cases, a series of three fungicide treatments applied to the rosaceous host at budbreak and two more times at 7-day intervals should alleviate the problem.



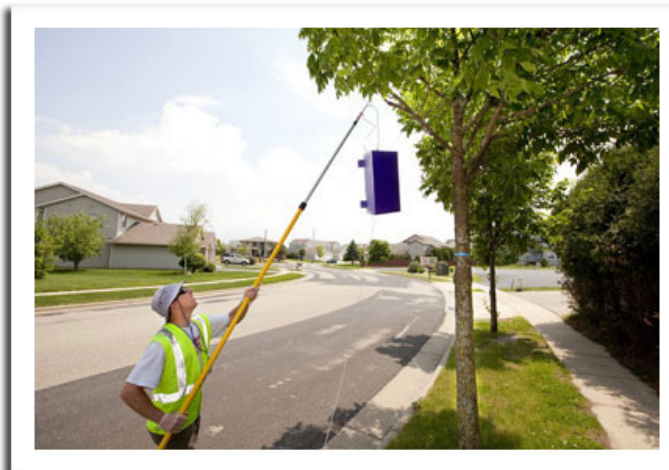
Hawthorn rust

Tim Boyle DATCP

FOREST

EMERALD ASH BORER: The first beetles of the season were collected by June 3 on panel traps at Newburg and Victory, and approximately 20 more have been trapped in Vernon County in subsequent weeks. Larvae and adults

were also detected for the first time in ash trees in the City of West Bend earlier this month.



Scott Schumacher hanging an EAB trap

Steve Apps WI State Journal

GYPSY MOTH SPRAY: Mating disruptant was applied to 82,900 acres in Buffalo, Chippewa, Crawford, Grant, Iowa, La Crosse and Vernon counties this week, and another 27,425 acres are scheduled for treatment on June 25 in Clark, Eau Claire and Jackson counties. Selected areas in Bayfield and Douglas counties, totaling approximately 58,785 acres, will also receive pheromone flake treatments at a later date.

GYPSY MOTH SURVEY: Seventy-three percent of the expected 29,655 pheromone traps have been deployed as of June 23, leaving fewer than 8,000 traps to set by the first week of July. The annual trapping survey is being conducted in 45 western counties this season.

APPLE INSECT & BLACK LIGHT TRAP COUNTS JUNE 18 - 24

COUNTY	DATE	SITE	STLM ¹	RBLR ²	CM ³	OBLR ⁴	OBLR ⁵	AM RED ⁶	AM YELLOW ⁷
Bayfield	6/18-6/24	Keystone	0	0	2	1	—	0	*10
Bayfield	6/18-6/24	Bayfield Apple	—	—	—	—	—	—	—
Bayfield	6/14-6/21	Oriente	6	0	0	0	—	—	—
Brown	6/18-6/24	Oneida	1300	0	21	0	—	—	—
Chippewa	6/18-6/24	Chippewa Falls 1	0	10	4	5	0	0	0
Chippewa	6/18-6/24	Chippewa Falls 2	—	—	—	—	—	—	—
Dane	6/18-6/24	Deerfield	875	57	6	2	—	0	0
Dane	6/18-6/24	McFarland	5	0	5	0	—	*5	0
Dane	6/17-6/23	Stoughton	212	109	8.5	0	—	—	—
Dane	6/18-6/24	West Madison	226	50	6	2	—	0	0
Dodge	6/18-6/24	Brownsville	14	2	6	4	—	0	*1
Fond du Lac	6/18-6/24	Campbellsport	300	11	0	30	—	—	—
Fond du Lac	6/18-6/24	Malone	1050	20	19	15	—	0	0
Fond du Lac	6/18-6/25	Rosendale	264	3	6	7	—	0	0
Grant	6/18-6/24	Sinsinawa	—	—	—	—	—	—	—
Green	6/18-6/24	Brodhead	11	36	0	6	—	0	0
Iowa	6/18-6/24	Dodgeville	230	59	75	19	1	*1	*1
Iowa	6/18-6/24	Mineral Point	352	116	5	10	—	*1	**1
Jackson	6/18-6/24	Hixton	24	0	1	4	4	0	0
Kenosha	6/18-6/24	Burlington	275	0	3	2	—	—	—
Marinette	6/18-6/24	Niagara	635	0	77	0	—	—	—
Marquette	6/18-6/24	Montello	264	23	3	0	—	0	0
Ozaukee	6/14-6/22	Mequon	300	10	12	19	—	—	—
Pierce	6/18-6/24	Beldenville	560	0	12	6	0	—	—
Pierce	6/18-6/24	Spring Valley	446	21	7	2	0	—	—
Racine	6/18-6/24	Raymond	883	32	8	14	—	0	0
Racine	6/18-6/24	Rochester	560	104	19	1	—	0	0
Richland	6/16-6/22	Hillpoint	700	35	1.5	1	3	—	—
Sheboygan	6/18-6/24	Plymouth	—	—	—	—	—	—	—
Walworth	6/18-6/24	East Troy	50	5	1	0	—	0	0
Walworth	6/18-6/24	Elkhorn	50	3	0	4	—	0	0
Waukesha	6/18-6/24	New Berlin	1700	17	40	35	—	0	0

¹Spotted tentiform leafminer; ²Redbanded leafroller; ³Codling moth; ⁴Obliquebanded leafroller EASTERN; ⁵Oblique-banded leafroller WESTERN; ⁶Apple maggot red ball; *Unbaited AM trap; **Baited AM trap; ⁷Apple maggot yellow board.

COUNTY	DATE	SITE	ECB ¹	TA ²	BCW ³	SCW ⁴	DCW ⁵	CE ⁶	CEL ⁷	WBC ⁸	FORL ⁹	VCW ¹⁰
Chippewa	6/18-6/24	Chipp Falls	0	0	0	0	13	0	0	0	0	0
Columbia	6/18-6/24	Arlington	0	3	0	30	0	0	3	0	0	0
Grant	6/18-6/24	Lancaster	5	0	0	4	0	0	0	0	0	0
Manitowoc	6/18-6/24	Manitowoc	—	—	—	—	—	—	—	—	—	—
Marathon	6/18-6/24	Wausau	—	—	—	—	—	—	—	—	—	—
Monroe	6/18-6/24	Sparta	0	0	0	15	0	0	0	0	0	0
Rock	6/18-6/24	Janesville	0	12	0	0	0	0	16	0	1	0
Walworth	6/18-6/24	East Troy	0	0	0	0	0	0	0	0	1	0
Wood	6/17-6/24	Marshfield	17	26	1	83	0	1	0	0	0	2
Vernon	6/18-6/24	Coon Valley	—	—	—	—	—	—	—	—	—	—

¹European corn borer; ²True armyworm; ³Black cutworm; ⁴Spotted cutworm; ⁵Dingy cutworm; ⁶Corn earworm; ⁷Celery looper; ⁸Western bean cutworm; ⁹Forage looper; ¹⁰Variegated cutworm.